



Instruction Manual
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Military Global Distribution Game Instructions

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Military Global Distribution Game (MGD Game) User's Manual

- 1) **Introduction.** The Military Global Distribution Game borrows from other open-source games (specifically, the MIT Beer Game) to provide a representation of a four-tiered commodity distribution chain where each link in the system has a limited view of the entire system and must make decisions with incomplete (local) information. This version of the game was created specifically for the faculty and students of the US Army War College, but is open to other users as desired.
- 2) **Learning Objectives.** The objective of the Military Global Distribution Game is to provide USAWC students with an understanding of the impact of systems upon human behavior as discussed by Peter Senge in *The Fifth Discipline*, aiding in understanding the key elements of the concept of systems thinking. Understanding systems thinking supports the following USAWC Themes and Institutional Learning Objectives (ILOs):
 - Human Dimensions of Strategic Leadership and Strategic Vision
 - ILO 1 - Distinguish the uniqueness of strategic-level leadership and apply competencies required by strategic leaders
 - ILO 2 - Use strategic thought processes to evaluate the national security challenges and opportunities facing the United States in the 21st Century
 - ILO 7 - Synthesize critical elements, enablers, and processes that define the strategic environment in peace and war
- 3) **Intended Use.** The MGD Game is designed to support multiple seminars, each with its own instructor able to modify the default settings of the game to meet his specific seminar learning objectives. Instructors will create a game, decide whether to modify any of the default settings, then save and name that game for use by their seminar. Students then log in and play that game for their seminar on one to four computer systems. During game play, the instructor is able to participate as a player or to watch game play as an observer. At the conclusion of the game, a number of reports are available which provide the instructor with a set of visual cues to lead a seminar discussion about systems and systems thinking.
- 4) **Technical Game Requirements.** There are very few hardware or software requirements to play the Military Global Distribution Game (MGD Game). The MGD Game is available on the internet at <http://www.strategicleader.us> and was developed using Macromedia Flash. These choices allow players to play the game, without installing any game-specific software, directly inside their internet browser. As such, the only requirements to play the game are as follows:
 - a) An active internet connection
 - b) One of the following Internet Browsers: Internet Explorer (version 5 or better), Mozilla, Safari, or Firefox.
 - c) Macromedia Flash player (version 5 or better) installed on the computer. If Flash Player is not installed, the internet browser should prompt the user that Macromedia Flash is required, and ask if the user would like to install. Macromedia Flash must be installed for the game to work properly.
 - d) Allow pop-up windows from strategicleader.us. This is because once the user logs in the game does a redirect to a new window that only contains game data. Note that the user must allow pop-ups in Internet Explorer and any other toolbars with popup blockers (such as the Google or Yahoo toolbars).

Users on government computers or who experience difficulty should see their system administrator to ensure that Macromedia Flash Player is installed and that pop-ups are allowed.

- 5) **Game Overview.** In this game, players manage the four components of a product distribution supply chain.



The default components in the supply chain are Retailer, Wholesaler, Distributor or Factory. The specific names can be changed during game setup by the course instructor. All four roles must be played for the game to proceed, so in the event there aren't enough people to fill all 4 roles, one player must play multiple roles, or the instructor can choose to play unfilled roles. Each players' goal is to meet its customers' demands while

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minimizing cost. He must try to accomplish this goal solely based upon the limited information available to him on his screen, there should be no direct communication between players of differing roles. Each component in the supply chain has unlimited storage capacity.

- 6) **Default Settings.** The default setting for each game is 24 weeks. Each week all 4 players must process their incoming orders and then submit an order to their upstream supplier. Each player will have inventory of “the product” to use to fill incoming orders. In the event that a player doesn’t have enough inventory to fill an order, he will ship the amount available and place the remaining amount into backorder to be filled as soon as possible. The game cannot advance to the next week until all four players have taken their turn and submitted orders for the week.
- 7) **Delays.** There are two built in delays to the game. The first is a one week order delay. An order submitted one week is not received and processed by the upstream supplier until the next week. The second delay is a two week shipping delay. Suppliers will fill all orders as soon as possible, but there is a two week delay from the time the product is shipped until the next component receives it. The total delay then, is 3 weeks from the time an order is placed until the results of that order arrive in a players’ inventory. It is worth noting that the 3 week delay is the minimum delay for all components except the factory, because this assumes that the supplier has enough inventory to meet the order as soon as he receives it. In the case of the Factory, this is always true, but for all others, their orders may be delayed greater than 3 weeks due to inventory shortages in other elements of the system.
- 8) **Information.** Each Player has only a limited amount of information available to him or her. This information is a snapshot of current status and the “due in” shipments two weeks in advance.
- 9) This picture shows a sample game screen for the wholesaler role. This screen shows the starting inventory, the incoming and outgoing shipments, the number of items in backorder, and the number of items the distributor has on backorder. Each player must process incoming orders and submit a supply order before the game can advance to the next week.
- 10) **Turns.** The player must do two things during each turn: Receive Incoming Orders, and Submit an order to their supplier.



i) **Incoming Orders.** The first step is to process incoming orders. To do this, the player must click the **Process Order** button. As soon as the player clicks this button, his screen will automatically adjust the totals to reflect the following.

- (1) Items in the distributor shipping delays are advanced to the left. Items one week out are added to inventory, and items two weeks out are shown as due in next week. The number of items in the second delay box will not be shown until play advances to the next week. So from the picture above the amount of inventory will increase from 4 to 8.
- (2) The new Inventory amount (original plus the amount just received - 8 from the example above) is then used to fill the backordered items (if any) and then the incoming orders (if possible).. In the picture above there are no items on backorder, and no new orders, so the Inventory amount will remain at 8.
- (3) The filled orders are immediately shipped and are shown in the first wholesaler delay box. The previous value in the first wholesaler shipping box will be moved to the second wholesaler shipping delay box. In the example above there were no orders, so the first shipping delay will go to 0 and the second shipping delay will reflect 4. Below is a picture of these changes after the player has clicked process order but before he has submitted an order to his supplier.

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- (4) Costs. Note the cost data in the bottom right portion of the screen. As stated in the introduction, the overall goal of the game is to minimize cost individually, as well as cost for the overall system.ⁱ
- (5) Player costs are calculated each week after incoming orders are processed. The charges are as follows:
- An inventory cost of \$0.50 for each unit of on hand inventory
 - An inventory cost of \$0.50 for each unit being shipped to a downstream customer.
 - For the Factory, an additional inventory cost of \$0.50 for raw materials in transit from the unlimited production supply.
 - Backorders represent lost sales and therefore cost double, or \$1.00 for each unit in backorder.
 - Players can see both their weekly cost and total cost. In the example above, the wholesaler has 8 items in inventory, and 4 in shipping delay, for a total of 12. Thus, he is charged a total of \$6.00 for the week.



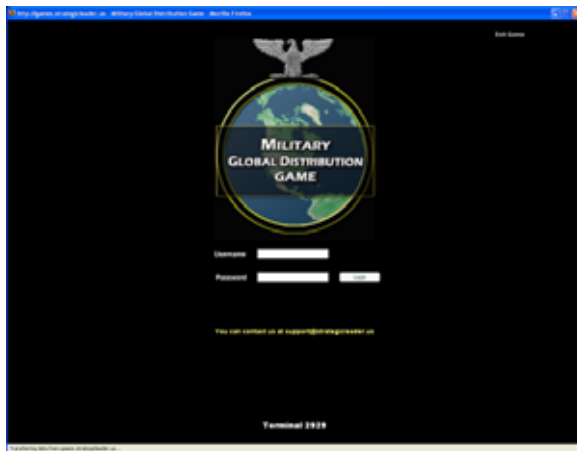
- 11) **Placing an Order.** The second step (for each player for each week) is to submit an order. Each player must decide how much to product to order. To help in this decision he has the following information available:
- Current inventory.
 - Amount of product due in next week
 - Most recent order (available by clicking the *financial report* button)
 - Personal estimates / intuition
 - Past demand history (available by clicking the *financial report* button)
 - Upstream supplier's backorder.
 - Other historical information in the financial report.

Once the player decides how much product to order, he enters that value in the **Place Order** box, and then clicks the **Submit Order** button. The player's weekly turn is now over. Once all players (or all 4 elements of the distribution chain) have completed their weekly turn, then a button will appear allowing the player to advance the game to the Next week.

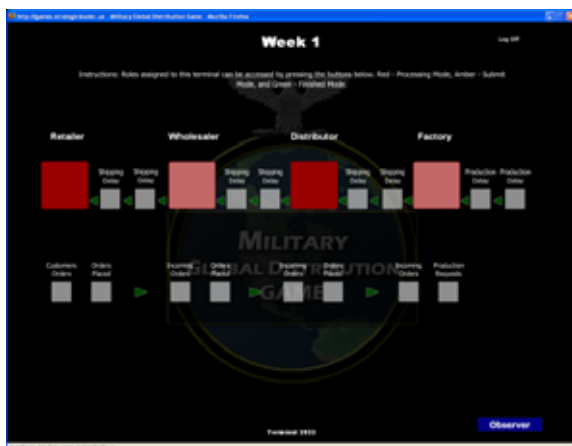
ⁱBecause this game does not include any "profit," the ideal system cost would be in the case where every element in the distribution chain orders exactly the amount required to meet ultimate demand with no excess inventory or backorders. In this perfect system the only costs would be inventory costs during shipping. While this idea is probably never achievable, a rough estimate of a "perfect" system is the sum of all demands times 8 weeks of shipping delay/inventory cost of \$0.50 per unit....so approximately \$4 x total demand, with each component sharing approximately one fourth of that cost.

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- 12) **PLAYER INSTRUCTIONS – Login.** To play the MGD Game, open a web browser and type in <http://www.strategicleader.us>. Select the Military Global Distribution Game icon and you will be directed to the screen on the left, below.



- A. Each player should have a Username and Password from his/her instructor. Type them into the appropriate fields and hit Login. The player should then see the page on the right, above.
- B. The player must click on the appropriate gray box to select a player role. The role should now change colors and read “Assigned to this Terminal”. When all four roles have been assigned, a Join Game button will appear.
- C. In the example to the right, the retailer and distributor roles are being played on one machine and labeled as “Assigned to this Terminal”, while the wholesaler and factory roles are being played on a different machine and shown as “Assigned to Terminal 2933”. The terminal numbers are assigned by the game server.ⁱⁱ



- D. When all roles have been assigned, one of the roles on each computer the game is being played must select the Join Game button. If multiple roles are being played on one machine, then only one role must select Join Game. Next, the player will see to the screen on the left. Roles that appear in dark red show the roles which are being played on this computer. Roles that appear as light red are being played on a different computer.

ⁱⁱ Note -- If more than one role is being played on a single machine, then each team must wait until the terminal is free before processing and inputting their orders for the week. This will prevent any one player (or player team) from seeing the status of other parts of the system.

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- 13) **Player Instructions – Game Play.** The following screens will show the screens for the Distributor. All four roles perform the same actions, so we will not repeat these instructions for each role. From the previous screen, the player would click on the red block under the distributor name. Next he will see the current status of the current week. Shown below is an example of week 1 for the Distributor. As mentioned before, the game player has two steps for every turn: Process incoming orders, and Submit order to his supplier.



- A. **Process Incoming Orders.** Select *Process Order*. The incoming orders will be filled entirely, if possible, and shipped to the wholesaler. The Delays will advance to the left as the order is processed. The second delay value will appear as a ? at this point as you won't know the value that has been shipped from the factory until after the game has advanced to the next week. The following picture shows the Distributor Screen after the order has been processed.



- B. Because the incoming order was 0 and the backorder was also 0, the Distributor does not ship any units. The first "shipping delay" box on the screen to the right reflects this with a 0.
- C. On hand inventory increased from 4 to 8 because 4 units arrived in from the factory.
- D. Cost for this week for the Distributor then is \$6.00. He has 8 units in inventory and 4 in shipping, so his cost for the week is $12 \times \$0.50 = \6.00 .

- E. **Submit Order to Supplier.** Next, the player must decide how many items to order. Since this is the first week, there is no historical data to review in the Financial Report. In this example, because there are still 8 items in inventory, the Distributor believes that he has plenty of product for the time being and orders 0.



- F. To finish the task he must type in the number and click *Submit Order*. Once an order is submitted, the player cannot go back to week 1. He can view data from week 1 by selecting the financial report box on his next turn.

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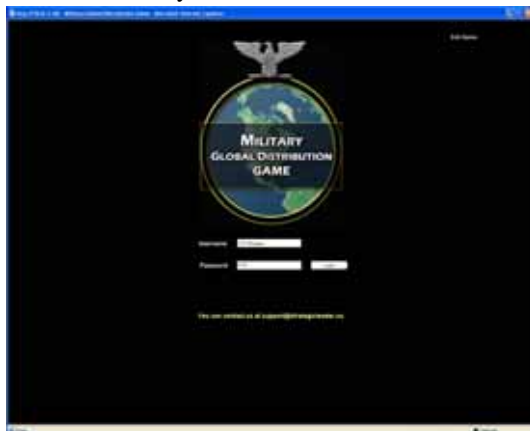
- G. Await Next Turn.** After clicking the *Submit Order* button, the player is taken back to the role overview window to the right. Notice that the wholesaler block is now Green. It is dark green because the wholesaler has both processed incoming orders and submitted an order on the local machine. The block would appear as yellow if incoming orders has been processed but no order submitted. All four roles must complete their turns before anyone can proceed to the next week.



- H. Advance to Next Week.** After clicking on the *Proceed To Next Week* button, the game will advance to Week 2 as shown on the left.

- 14) **End of Game.** The sequence of events described above is repeated for the length of the game. At the end of the defined game length point, an *End of Game* button will appear. Players will initially see a black screen without all of the historical “ground truth” information. This will allow player discussions based on their assumptions (...and before knowledge of the complete “ground truth”). The default game length is 24 weeks, but each instructor can change this length to accommodate his individual learning objectives. Additionally, a instructor can end the game at any time by clicking on the *Observer* button, then instead of logging in as Observer, log in as his administrative instructor name. Once he has done this, the instructor will be able to click *End Game*. All play will stop, and the MGD Game will prepare the reports presentation for use by the Instructor in post-game discussions.
- 15) **Game Administration for Instructors.** Each instructor will be able to login and maintain his/her personal game site for their seminar or group of students. At this site, he is able to create new games, edit game parameters, change passwords and other basic game administration functions that will be described in the following sections.

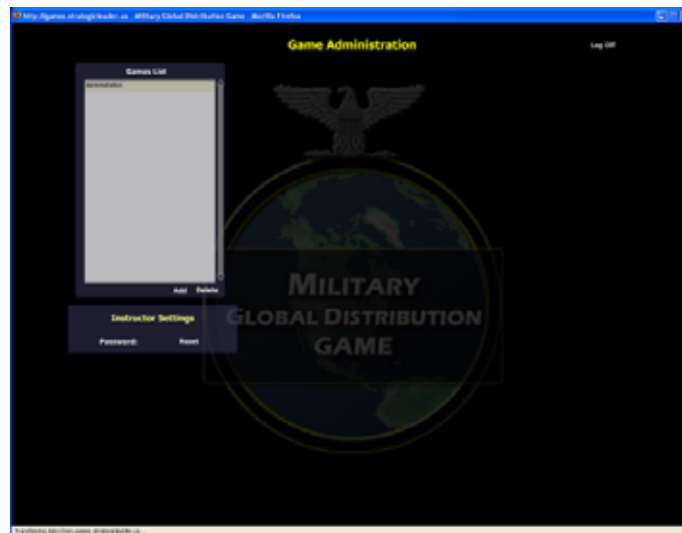
- A.** To play the MGD Game, open a web browser and type in <http://www.strategicleader.us>. Select the Military Global Distribution Game icon and you will be directed to the screen on the left, below.



- B.** To login, type in your username and password at the login screen and then hit the Login button. If this is your first time to login, the default password for your username is seeg. After logging in for the first time, it is recommended that you change your password to one of your choosing. A description of how to change your password is described in the Change Password section below.
- C.** If you are having problems logging into your account, please contact the game administrator at support@strategicleader.us with your desired username or a description of your problem in the email.

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- D. After login, you will be directed to your Game Administration screen. A listing of all formerly created games will appear. In this example, a game called *demonstration* has already been created.



- E. **Change Password.** To change the default password or to reset your password, go to the Instructor Settings block and select *Reset*. An *Edit Password* Menu will appear and you will type in your new password, confirm it, and then hit OK. Your password has been changed.



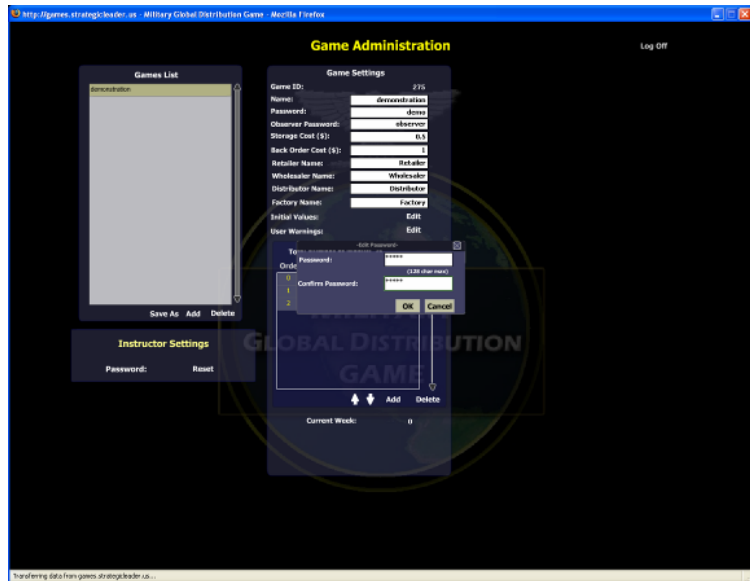
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F. Creating a New Game. To create a new game, select the **Add** button on the Games List menu. Type in the desired Game Name and assign a password for that game. You will give this information to the students to enable them access to the game.

G. Click **OK** and the game will be created. If you highlight the game, a Game Settings window will appear which shows all of the game parameters. Each newly created game uses a standard set of default parameters which are tailorable to each professor's individual desires.

H. If the instructor is satisfied with the default game values, then he may logout and his students are ready to play the game.

I. An explanation of each parameter and their default values are listed below the following picture. The Instructor can choose to view the settings for any of the games in your list by selecting the game in Games List and the Game Settings will appear.



- 1) Name – Lists the name that each Instructor gives to the game. Each student to play the game will type this as the username at the login screen.
- 2) Password – Password that the instructor assigns for this game. For each game, the student will need to type in the associated password to gain access into the game.
- 3) Observer Password – The Observer has total visibility of all components of the game (typically the instructor). This is the password to log into the game as an observer. The default password is observer, but instructors should enter a unique password should be entered here for each game. See the following section on Observer for more details.
- 4) Storage Cost (\$SC) – The amount that each team will be assessed for each excess unit of inventory after weekly orders have been filled. The default value is \$0.50 per unit.
 - a) Retailer Cost: $\text{inventory} \times \SC
 - b) Wholesaler Cost: $(\text{inventory} + \text{shipping}) \times \SC
 - c) Distributor Cost: $(\text{inventory} + \text{shipping}) \times \SC
 - d) Factory Cost: $(\text{inventory} + \text{shipping} + \text{inbound shipping}) \times \SC
- 5) Backorder Cost – The amount each team is charged for orders that have been received but not shipped to the downstream supplier. This represents lost sales opportunity so the default values are twice \$SC, or a rate of \$1.00 per unit.



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- 6) The 4 default roles in the MGD Game are Retailer, Wholesaler, Distributor and Factory. Instructors can tailor these role names by replacing the default value in each of the respective name fields with the new role names.ⁱⁱⁱ
- 7) Initial Settings: Each game that is created has the default initial game parameters. To change these starting values, then select **Edit** and the following Initial Settings window (below) will pop up. From this point, the instructor can replace the starting value(s) with the new value, and then select **Save**. The default values are shown below:

- Retailer Inventory: 4
- Wholesaler Inventory: 4
- Distributor Inventory: 4
- Factory Inventory: 4
- All Delays: 4
- Initial Wholesaler Orders: 0
- Initial Distributor Orders: 0
- Initial Factory Orders: 0

- 8) User Warnings: For each of the 4 roles, instructors can set an initial warning value that if reached during game play, will cause that value to flash with a red box around it to let the player know that they have reached a dangerously high inventory or cost level. A new game will not set any warning levels.

- 9) To set a warning value for a role, insert the value in the field for that role and select the box to the left of the name. Then select Save for the values to be saved and used in the game. In the example below, the Retailer will be warned if either his inventory or his back order value reaches 10 and the Distributor will be warned if his inventory reaches 10 or his back order amount reaches 4. Note – Instructors must both insert a value and select the gray box beside the warning. If there is a value, but the box to the left is not selected, there will be NO warning indicators.

- J. Setting game duration and customer demand.** The default game duration is currently set to 24 total weeks. The customer demand is set to 4 for the first 4 weeks, 10 for the next 3 weeks, and 6 for the last 17 weeks. Each instructor can customize these values to set the demand flow of his choice. To modify the current settings, choose the entry to change, and then select **Edit**. In the following example, the instructor wanted to increase the initial timeframe that the user demand would be 4. So, he selected the first time period, clicked **Edit**, and replaced the duration value of 5 with 15.

ⁱⁱⁱ NOTE: Each of the above fields is editable by highlighting the text and re-typing a new value. When any field is edited, a **Save Game Settings** selection appears. Instructors must click this button for any changes to be saved.

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- a. Next the Instructor clicks **OK**. The result of the edit is shown on the right. Notice that the Total number of weeks advanced by 10 to 46.



- b. Suppose the instructor still only wants the game to run for 36 weeks. He can accomplish this by reducing the duration of Order 2 or 3 by a total of 10 weeks using the **Edit** capability, or by deleting one of the order periods.

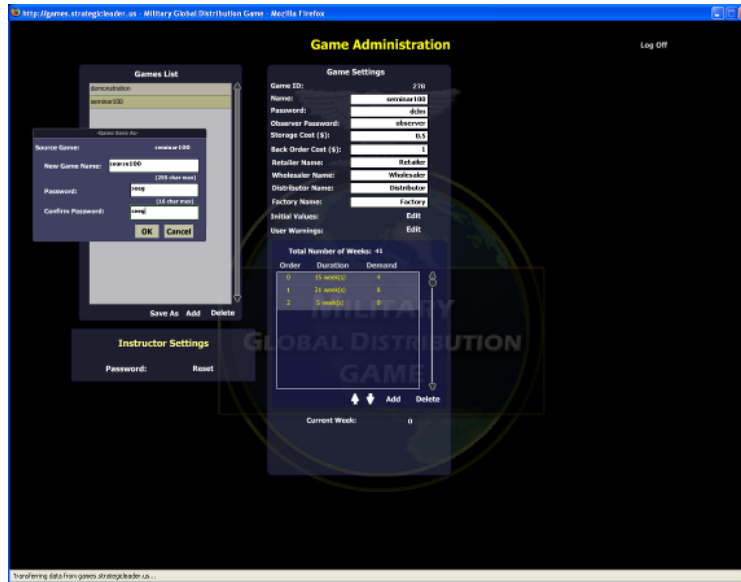
- c. In the picture to the right, the instructor has chosen to deleting the 3rd order period, Order 2. To do this, he simply select order 2 and clicks the **Delete** button. This changes the Total Number of Weeks back to 36 as shown below. As noted before, the instructor must click **Save Game Settings** for changes to be accepted and applied to his game.



- d. Instructors also have the capability to add a new duration and customer demand by selecting the **Add** button. In the example to the left, the instructor wanted to end the game by taking customer demand to 0 for 5 weeks. To do this, he selected **Add**, and inserted 5 in the duration field, and 0 in the demand field. He clicks **OK** and then **Save Game Settings**. He can repeat this process for as many different order periods as he deems necessary.
- e. One final setting is the ability for instructors to move game durations and demand up and down the list by selecting one and choosing either the **up arrow** or **down arrow**. This will automatically adjust the list. Again, after any change (or all changes) the instructor must click **Save Game Settings** to complete the revisions.

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- K. Creating a Duplicate Game.** An instructor may also create a new game using the game parameters of a previously configured game. To do this, he selects the game name he wishes to copy and then clicks **Save As**. A window will pop-up showing the Source Game (i.e.... the game to be copied). Here, the instructor must insert a New Game Name and also assign an associated password for the new game. After doing this, click **OK** and the new game will be created with duplicate game settings.



- L. Game Observers.** It is possible for the instructor, or someone he designates, to login to a game as an observer. The observer functionality allows one to watch as orders are processed and new orders submitted for each of the four roles as they occur. From the observer function instructors will have simultaneous visibility of all four components. He can also view the financial report for any of the four players and view their order history. Finally, if the instructor needs to communicate with players on distant or remote computers, he can use the Messenger chat box. Observers can chat with any or all players, but players can only chat with the Observer.

- M. Observer Instructions.** To view an MGD Game as an observer, the following steps are required:

- Open a web browser and type in <http://www.strategicleader.us> . Click the Military Global Distribution Game icon and proceed to the login screen.
- At the Login to screen, enter the game name as the username and the game password in the password field. If the Observer is not the instructor, then he must obtain the game name and game password before he can proceed to the next step.
- After login, you will be directed to the screen on the right.



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- d. Next click the blue **Observer** button. A window will appear asking for the observer username and password. The default observer username is observer. The default password is also observer.^{iv}



- e. Click OK and you will be directed to the screen below. Hitting the Back button will take you to the role selection screen.
- f. In this example, each role occupies a window that is a quarter of the screen. The purple screen means the player has not began taking his turn. In this case, neither the retailer nor the factory has gone. The window will turn yellow when a player has processed an order and will turn green when an order has been submitted and the player turn is over. In the above example the distributor has processed its' incoming orders, but has not submitted an order. The wholesaler is done with his turn. When all players have taken their turn, all squares will turn green. When the game is advanced to the next week, the Week will increment and all roles will return to the original purple color.



- g. The Messenger button opens a small chat window which allows the observer to send a message to one of the four players by using the pull down menu to select the role. See picture.



^{iv} Note: The observer name and password can be changed at game creation or anytime before the game starts. Instructors, see above section on Creating a New Game to learn how to change the observer login name and password.

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- h. The Observer can select a role and then type a message to that player. In the example to the right, a message is being sent to the factory to watch its' inventory level.
 - i. The role player playing the factory side will now see a blinking red light next to the Messenger button when a message has been received from the observer. The factory can then send a chat message back to the observer if desired.
 - j. Once the Factory responds, a red light will blink next to the Messenger button on the observer screen. The players cannot chat between themselves, only to the observer.
 - k. Ending the Game. The **End Game** button is used by the instructor to bring an end to a game before the preset week limit is reached. Thus, if a game is scheduled for 52 weeks, he can select this button and end the game at any time. A basic observer will not have this option, only an instructor who logged in with his instructor name/password after clicking the blue **Observer** button.
 - l. If the Instructor is not logged in on any machine as an Observer, he can still end the game. He must simply go to any terminal, click on the blue **Observer** button, then enter in his instructor login/password. Once logged in on that computer he will see the **End Game** button which will end the game for all roles. See the next section for more detailed explanation of End Game instructions and reports menus.
- N. END OF GAME.** The game ends in one of two ways. The first (as described above) is when an instructor decides to end the game early before the total number of game weeks has been played. The second is when the players have reached the total of planned weeks. In order to prevent players from implementing "end game strategies" we recommend that players not be told the actual length of the game.
- a. In the screen on the right, the game was created to end after 24 weeks, even though the players believed it would last 52 weeks. The players have finished Week 24 and are about to proceed to the next week.
 - b. When the **Proceed To Next Week** button is selected, the players and any observers will be directed to the following screen to signify the end of the game.
 - c. Selecting the **End of Game** button will immediately take the players and observer to the results section. Any discussions about game play or results should occur now before the **End of Game** button is selected. Some instructors may choose to have the game players estimate the original customer demand before proceeding to the summary charts.
 - d. When the instructor is ready to proceed to the results, he should have all the game players select the End of Game button. They will then be directed the first result graph of the retailer as shown below.



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- e. This graph shows the history of inventory, back order, incoming demand and orders placed for the retailer. The instructor (or student) can choose to view a subset of these four factors by deselecting the X to the left of the factors you don't want to see and then hitting the refresh button. Note: This is true for all graphs which have multiple factors. The following picture shows a graph after the demand and orders placed have been taken away.



- g. To see customer demand click the **Demand** button. In the example to the right, the original customer demand was 4 for the first four weeks, 10 for the next three weeks and 6 for the remaining 17 weeks.



- i. **Back Order Cost** represents the weekly back order cost for each of the four roles. In the example to the right, the Retailer ended with the highest back order cost while the Distributor had the lowest back order cost.



- f. The graphs for the Wholesaler, Distributor and Factory will all look similar to these. Players can view the graphs for these roles by selecting the button which corresponds to the role they wish to view.

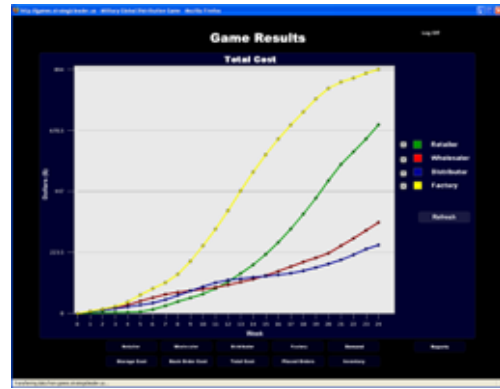


- h. **Storage Cost** represents the weekly storage cost for each of the four roles. In the example to the left, the Factory had the highest storage cost and the Retailer had the lowest storage cost.



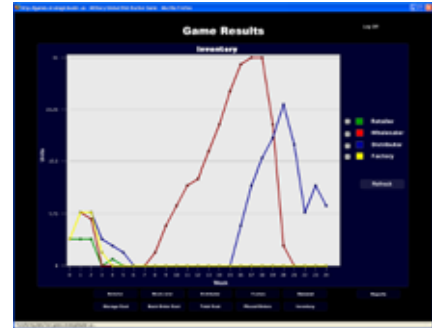
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- j. **Total Cost** shows will see a graph which adds the Storage Cost and Back Order Cost for each player and graphs the total cost for each. In the case below, the Factory had the highest total cost, while the Distributor ended the game with the lowest overall cost.



- k. **Placed Orders** is a graph of each player's ordering history each week. Players can compare this to the other players order history or view against the original customer demand.

- l. **Inventory** shows the inventory level per week for each of the players.



- m. At any time, Players or Instructors can select the **Reports** button. Shown below is a table which shows the history of game details for the **Retailer**.
- n. To see the other players details click the **Wholesaler**, **Distributor** or **Factory** button.
- o. When finished, return to the graphs section by selecting the **Graphs** button.
- p. When finished reviewing the Game Results, players can choose to **Log Off** the game or close the internet browser window.

Game Results							
Retailer Weekly Report							
Week	Inventory	Back Order	Demand	Order	Storage Cost	Back Order Cost	Total Cost
0	4	0	0	0	\$ 0.00	\$ 0.00	\$ 0.00
1	4	0	4	5	\$ 2.00	\$ 0.00	\$ 2.00
2	4	0	4	8	\$ 2.00	\$ 0.00	\$ 2.00
3	0	0	4	10	\$ 0.00	\$ 0.00	\$ 0.00
4	1	0	4	7	\$ 0.50	\$ 0.00	\$ 0.50
5	0	3	10	3	\$ 0.00	\$ 3.00	\$ 3.00
6	0	8	10	5	\$ 0.00	\$ 8.00	\$ 8.00
7	0	14	10	0	\$ 0.00	\$ 14.00	\$ 14.00
8	0	15	6	0	\$ 0.00	\$ 15.00	\$ 15.00
9	0	14	6	1	\$ 0.00	\$ 14.00	\$ 14.00
10	0	14	6	1	\$ 0.00	\$ 14.00	\$ 14.00
11	0	20	6	4	\$ 0.00	\$ 20.00	\$ 20.00
12	0	25	6	0	\$ 0.00	\$ 25.00	\$ 25.00
13	0	20	6	0	\$ 0.00	\$ 20.00	\$ 20.00
14	0	32	6	1	\$ 0.00	\$ 32.00	\$ 32.00
15	0	38	6	0	\$ 0.00	\$ 38.00	\$ 38.00
16	0	44	6	3	\$ 0.00	\$ 44.00	\$ 44.00
17	0	49	6	0	\$ 0.00	\$ 49.00	\$ 49.00
18	0	55	6	10	\$ 0.00	\$ 55.00	\$ 55.00
19	0	58	6	20	\$ 0.00	\$ 58.00	\$ 58.00
20	0	64	6	20	\$ 0.00	\$ 64.00	\$ 64.00
21	0	60	6	10	\$ 0.00	\$ 60.00	\$ 60.00
22	0	46	6	10	\$ 0.00	\$ 46.00	\$ 46.00
23	0	47	6	10	\$ 0.00	\$ 47.00	\$ 47.00
24	0	52	6	4	\$ 0.00	\$ 52.00	\$ 52.00
Week	0.38	38.63	6.17	5.50			
Standard Deviation	1.13	36.24	1.66	5.86	\$ 4.50	\$ 687.00	\$ 691.50
Total							

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O. Troubleshooting. Below are some troubleshooting techniques to try before asking for help. If these do not work, please contact your faculty instructor. FI's or students with persistent problems, please contact the SEEG at support@strategicleader.us or the Government MGD Game POC, LTC Burgess, at rene.burgess@us.army.mil.

- a. What if the *Advance To Next Week* button doesn't appear?
 - 1) Check that all roles have completed their turn. Icons should appear as green in overview window.
 - 2) Roles that don't appear as green need to finish their turn. Players may have submitted an order so that they think they are done with their turn, but it is possible that the server didn't get their response. If this is the case, those players should click the box under their role and re-submit this week's order.
- b. What if the MGD Game Parameters are not correct or are not what the instructor intended?
 - 1) If already in the game, all participants should log out.
 - 2) Instructor should login with instructor name and password.
 - 3) Review the settings that seem incorrect.
 - 4) Change values as needed.
 - 5) Click *Save Game Settings*. If changes have been made and this button is not clicked, then the settings won't be saved.
 - 6) To change or review the start-up values of a game (amount of inventory already in the system) Click *Edit* for Initial Settings, change values as desired. When complete, click *SAVE* in this window or changes won't be saved.
- c. What if a player or instructor accidentally logs out of the game during game play?
 - 1) This should not be a problem – games are saved at the end of each update, so any player(s) who were logged off should be able to log back into the game by inputting the username and password for desired game.
 - 2) Once back into the game, that player should reselect the role he was playing and proceed back to the game at the point before logout. As long as the game is in session (the instructor has not clicked *End Game*) then players should be able to log in and out without problem (...although the other members of the system may not enjoy the wait!).
 - 3) The game cannot advance from one week to the next without all 4 roles participating. If one player logs off, the others will have to wait before proceeding past their current turn. The only way past this would be for the instructor or some other player to assume the missing player's role. This would allow the game to continue, but would also make it impossible for the original player to rejoin the game as his role would be taken by another computer.
- d. What If a player cannot log in to a game?
 - 1) Contact the player's instructor to ensure he has the correct game name and password.
 - 2) Re-try with name and password provided by instructor.
- e. What if a player logs on and all roles are taken?
 - 1) Players will have to contact their instructor and wait until one of the roles is un-selected by the current "owner" of that role. The way to do this (for the player who may have accidentally assumed two roles) is to log out of the game, then log back in and only assume one role.
- f. What if an instructor cannot log in as an instructor?
 - 1) If there is a good internet connection, the instructor can access www.strategicleader.us, the MGD Game login screen appears, and the instructor is using his correct username, then the only possible issue is the password. It is possible that the instructor attempted to change his password without saving. In this case, the instructor should use his previous password (the default is password) and reenter the game, change his password, and click *SAVE*.
 - 2) Failing the above, please contact please contact the SEEG at support@strategicleader.us or the Government MGD Game POC, LTC Burgess, at rene.burgess@us.army.mil.

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- g. What if a player or instructor does not get a login screen when clicking MGD Game, but instead get a black screen?
 - 1) Verify that there is not a second window open already logged into the game as it is only possible to have one window logged into MGD Game for each computer.
 - 2) A pop-up blocker will keep the login screen from appearing. Allow pop-ups for www.strategicleader.us [<http://www.strategicleader.us/>](http://www.strategicleader.us/) . This will prevent this from occurring in the future. Some browsers will display a message at the top of the screen advising the player to **click here** if the login screen doesn't pop-up. This is a bypass of the pop-up blocker which will work for this attempt only. Future attempts to log in will result in the same black screen unless pop-ups are permanently allowed from www.strategicleader.us.
- h. What if a user or instructor clicks **Exit Game** and nothing happens?
 - 1) This is a known feature which may occur with internet browsers other than Internet Explorer.
- i. How does an instructor or player save the end of game summary data?
 - 1) The MGD Game developers are adding buttons which will allow a player or instructor to save chart data to a file which could be opened by Microsoft Excel.
 - 2) The developers are also adding a print function to each of the summary pages.
 - 3) To save the current view to an image or slide for a MS Powerpoint or MS Word document follow these steps:
 - i. First, go to the desired screen or graph the user would like to save.
 - ii. Press **Shift** and **Print Screen** at the same time
 - iii. Open MS PowerPoint, MS Word or any other program such as Paint.
 - iv. Press **Ctrl** and **V** - - this will paste the image of the entire screen onto your document.
 - v. Once the image is in the document, the user will be able to right click and crop or resize as necessary.